

Missouri Department of Natural Resources



PUBLIC NOTICE

DRAFT MISSOURI STATE OPERATING PERMIT

DATE: July 16, 2004

In accordance with the state Clean Water Law, Chapter 644, RSMo, Clean Water Commission regulation 10 CSR 20-6.010, and the federal Clean Water Act, the applicants listed herein have applied for authorization to either discharge to waters of the state or to operate a no-discharge wastewater treatment facility. The proposed permits for these operations are consistent with applicable water quality standards, effluent standards and/or treatment requirements or suitable timetables to meet these requirements (see 10 CSR 20-7.015 and 7.031). All permits will be issued for a period of five years, unless noted otherwise in the Public Notice for that discharge.

On the basis of preliminary staff review and the application of applicable standards and regulations, the Missouri Department of Natural Resources (MDNR), as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions. The proposed determinations are tentative pending public comment.

Persons wishing to comment on the proposed permit conditions are invited to submit them in writing to the Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, Missouri 65102, ATTN: Peter Goode, Professional Engineer. Please include the permit number in all comment letters.

Comments should be confined to the issues relating to the proposed action and permit(s) and the effect on water quality. The MDNR may not consider as relevant comments or objections to a permit based on issues outside the authority of the Clean Water Commission, (see Curdt v. Mo. Clean Water Commission, 586 S.W.2d 58 Mo. App. 1979).

All comments must be postmarked by August 16, 2004 or received in our office by 5:00 p.m. on August 19, 2004. The requirement of a signed document makes it impossible to accept email comments for consideration at this time. Comments will be considered in the formulation of all final determinations regarding the applications. If response to this notice indicates significant public interest, a public meeting or hearing may be held after due notice for the purpose of receiving public comment on the proposed permit or determination. Public hearings and/or issuance of the permit will be conducted or processed according to 10 CSR 20-6.020.

Copies of all draft permits and other information including copies of applicable regulations are available for inspection and copying at DNR's website, <http://www.dnr.state.mo.us/wpscd/wpcp/homewpcp.htm>, or at the Department of Natural Resources, Water Protection Program, 205 Jefferson Street, P.O. Box 176, Jefferson City, Missouri 65102, between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday.

Public Notice Date: July 16, 2003

Permit Number: MO-0026310

Southeast Regional Office

FACILITY NAME AND ADDRESS	NAME AND ADDRESS OF OWNER
Mountain View WWTP East Old Highway 60 Mountain View, MO 65548	City of Mountain View PO Box 1090 Mountain View, MO 65548
RECEIVING STREAM & LEGAL DESCRIPTION	TYPE OF DISCHARGE
Unnamed Tributary to Jam Up Creek (Jam Up Creek), Sec. 23, T27N, R7W, Howell County	Domestic, reissuance

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No.

MO-0026310

Owner:

City of Mountain View

Address:

PO Box 1090, Mountain View, MO 65548

Continuing Authority:

Same as above

Address:

Same as above

Facility Name:

Mountain View Wastewater Treatment Plant

Facility Address:

East Old Highway 50, Mountain View, MO 65548

Legal Description:

SE ¼, NE ¼, Sec. 23, T27N, R7W, Howell County

Receiving Stream:

Unnamed Tributary to Jam Up Creek (U)

First Classified Stream and ID:

Jam Up Creek (C) (02696)

USGS Basin & Sub-watershed No.:

(11010008-050001)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

See page 2

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

Effective Date

Stephen M. Mahfood, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

Expiration Date
MO 780-0041 (10-93)

Jim Hull, Director of Staff, Clean Water Commission

FACILITY DESCRIPTION (continued)

Outfall #001 - POTW - SIC #4952

Emergency discharge from Peak Flow Holding Basin

Flows dependent upon precipitation

Storage capacity is 508,000

Wastewater contained by the peak flow basin during peak flow events is pumped back to the headworks of the treatment plant when hydraulic capacity becomes available.

Outfall #002 - POTW - SIC #4952

An anaerobic/anoxic/extended aeration basin/two final clarifiers/two traveling bridge filters/two aerobic digesters/ultraviolet disinfection/effluent holding basin. The effluent holding basin is used to irrigate Dayne Glass Municipal Golf Course on a seasonal basis. The sludge is land applied.

Design population equivalent is 3,837.

Design flow is 500,000 gallons per day.

Design peak flow is 1.6 MGD

Average flow is 258,260 gallons per day.

Outfall #003 - POTW - SIC #4952

Emergency discharge from irrigation holding basin.

Partial irrigation of treated wastewater at the city golf course. Actual flow is dependent upon irrigation needs.

Receiving Stream Watershed: Receiving stream is losing.

Irrigation Design Basis:

Design dry weather flows

Actual flow

Design PE: 3,837

Avg Annual

500,000 gpd*

83,000 gpd*

Storage Basin/Tank:

Freeboard for basin: 1 foot

Storage volume (minimum to maximum water levels) 204,750 gallons*

Days of Storage

Storage Capacity:

Design for Dry weather Flows: 2.5 days*

* Flow is only diverted to the storage basin as needed for consumptive irrigation.

Land Application:

Irrigation Volume/year: flow is dependent upon irrigation needs.

Irrigation areas: 50 acres at design loading.

Application rates/acre: 0.3 inch/hour; 0.22 inch/day; 1.55 inches/week; 53.92 inches/year

Field slopes: 25 acres: 0-8%

25 acres: 8-15%

Equipment type: sprinklers

Vegetation: grassland

Application rate is based on: hydraulic loading rate

					PAGE NUMBER 3 of 8	
A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PERMIT NUMBER MO-0026310	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAG E	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #002</u>						
Flow	MGD	*		*	once/daily	24 hr. total
Biochemical Oxygen Demand ₅ **	mg/L	1		10	once/month	24 hr. comp.
Total Suspended Solids**	mg/L	20		15	once/month	24 hr. comp.
pH - Units		***		***	once/month	grab
Fecal Coliform****	100	1000		400	once/month	grab
Ammonia as N (summer)	/L	11.6		2.1	once/month	24 hr. comp.
(winter)		13.6		2.4		
Chromium, Dissolved	µg/L	*		*	once/month	grab
Hardness	mg/L	*		*	once/month	grab
Temperature	°F	*		*	once/month	grab
Dissolved Oxygen	mg/L	*		*	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>MONTHLY</u> ; THE FIRST REPORT IS DUE _____.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I, II & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 4 of 8	
					PERMIT NUMBER MO-0026310	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #003 - at golf course - irrigated wastewater (Notes 4)</u>						
Storage Basin Freeboard	feet	*			once/month	measured
Irrigation Period	hours	*			daily	total
Volume Irrigated	gallons	*			daily	total
Application Area	acres	*			daily	total
Application Rate	inches per hour				daily	total
Rainfall	inches	*			daily	total
Fecal Coliform	#/100mL	200		200	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE _____.						
<u>Outfall #001 & 003 - Emergency discharge from basins (Note 5)</u>						
Flow	MGD	*		*	once/day*****	24 hr. total
Biochemical Oxygen Demand ₅ **	mg/L		45		once/day*****	grab
Total Suspended Solids**	mg/L		45		once/day*****	grab
pH - Units	SU	***		***	once/day*****	grab
Fecal Coliform****	#/100mL	1000		400	once/day*****	grab
Ammonia as N	mg/L	*		*	once/day*****	grab
Chromium, Dissolved	µg/L	*		*	once/day*****	grab
Hardness	mg/L	*		*	once/day*****	grab
Temperature	°F	*		*	once/day*****	grab
Dissolved Oxygen	mg/L	*		*	once/day*****	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE _____. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I, II & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ** This facility is required to meet a removal efficiency of 85% or more.
- *** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.
- **** Final limitations and monitoring requirements for Fecal Coliform discharged from Outfall #002 are applicable only during the recreational season from April 1 through October 31.
- ***** Monitor only when discharge occurs. Report as no discharge if a discharge does not occur during the report period.

Note 1 - Monitor only when irrigating wastewater at the golf course. Records shall be maintained and summarized into an annual operating report which shall be submitted by January 28th of each year for the previous calendar year period. The report shall include the following:

- a. Record of maintenance and repairs performed during the year, average number of times per month the facility is out of service if it is operating properly, and description of any unusual operating conditions encountered during the year;
- b. The number of days the basin was discharged during the year, the discharge flow, the reasons discharge occurred and effluent analysis performed; and
- c. A summary of the irrigation operations including freeboard at the start and end of the irrigation season, the number of days of irrigation for each month, the total gallons irrigated, the total acres used, crops grown, crop yields per acre, the application rate in inches/acre per day and for the year, the monthly and annual precipitation received at the facility and summary of testing results.

Note 2 - There shall be no discharge during normal operation. Annual irrigation rates shall not exceed consumptive uptake rates of the vegetation grown.

Note 3 - Basin freeboard shall be reported as basin water level in feet below the overflow level. See Special Conditions for Wastewater Irrigation System requirements.

Note 4 - Wastewater that is irrigated at the golf course shall be sampled at the irrigation pump or wet well.

Note 5 - Wastewater stored in the irrigation basin shall be land applied during suitable conditions so that there is no-discharge from the basin or irrigation site. An emergency discharge may occur when excess wastewater has accumulated above feasible irrigation rates due to precipitation exceeding the 1-in-10-year, 365-day rainfall or the 25-year, 24-hour storm event. An emergency discharge may also occur when the hydraulic capacity of the treatment plant, 1.6 MGD, has been exceeded.

C. SPECIAL CONDITIONS

1. Annual Report

An annual report for each outfall is required in addition to the listed reporting under Section A of the permit. The annual report shall be submitted by January 28 of each year for the previous growing season from October 1 through September 30 or an alternate 12-month period approved by the Department and listed in the Operation and Maintenance (O&M) Manual. This report shall be submitted using report forms approved by the Department and shall include a summary of the monitoring and recordkeeping required by the Special Conditions and Standard Conditions of this permit.

C. SPECIAL CONDITIONS (continued)

2. All outfalls must be clearly marked in the field.
3. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - (b) Incorporate new or modified effluent limitation or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
 - (c) Incorporate new or modified effluent limitation or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving water which is currently included in Missouri's list of waters of the state needing the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.
4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

 - (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
 - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
5. Report as no-discharge when a discharge does not occur during the report period.
6. Sludge and Biosolids Use For Domestic Wastewater Treatment Facilities
 - (a) Permittee shall comply with the pollutant limitations, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions.
 - (b) If sludge is not removed by a contract hauler, permittee is authorized to land apply biosolids. Permit Standard Conditions, Part III shall apply to the land application of biosolids. Permittee shall notify the department at least 180 days prior to the planned removal of biosolids. The department may require submittal of a biosolids management plan for department review and approval as determined appropriate on a case-by-case basis.

C. SPECIAL CONDITIONS (continued)

7. Water Quality Standards

- (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
- (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful odors or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to fish, shellfish, or aquatic life;
 - (5) There shall be no significant human health hazard from incidental contact with the water;
 - (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

8. Irrigation Design. Permittee shall operate the land application system in accordance with the design parameters listed in the Facility Description section of this permit.

9. Equipment Checks During Irrigation. The irrigation system and application site shall be visually inspected at least once/day during wastewater irrigation to check for equipment malfunctions and runoff from the irrigation site.

10. Wastewater Irrigation System.

- a. Discharge Reporting. Any unauthorized discharge from the storage basin or irrigation system shall be reported to the Department as soon as possible but always within 24 hours. Discharge is allowed only as described in the Facility Description and Effluent Limitations sections of this permit.
- b. Storage Basin Operating Levels - No-discharge Systems. The minimum and maximum operating water levels for the storage basin shall be clearly marked. The storage basin shall be operated so that the maximum water elevation does not exceed one foot below the overflow point except due to exceedances of the 1-in-10 year or 25-year, 24-hour storm events. Wastewater shall be land applied whenever feasible based on soil and weather conditions and permit requirements. Treated wastewater may be stored in the basin from March 1st to November 30th for the purpose of irrigating the golf course. The water level in the storage basin shall be lowered to the minimum operating level prior to each winter by November 30.

C. SPECIAL CONDITIONS (continued)

10. Wastewater Irrigation System (continued)

- c. General Irrigation Requirements. The wastewater irrigation system shall be operated so as to provide uniform distribution of irrigated wastewater over the entire irrigation site. A complete ground cover of vegetation shall be maintained on the irrigation site unless the system is approved for row crop irrigation. Wastewater shall be land applied only during daylight hours. The wastewater irrigation system shall be capable of irrigating the annual design flow during an application period of less than 100 days or 8 hours per year.
 - d. Saturated/Frozen Conditions. There shall be no irrigation during frozen, snow covered, or saturated soil conditions.
 - e. Buffer Zones. There shall be no irrigation within 30 feet of water supply withdrawal; 150 feet of dwelling; or 50 feet of property line.
 - f. Operation and Maintenance Manual. The permittee shall develop, maintain and implement an O&M Manual that includes the necessary items to ensure the operation and integrity of the waste handling and application systems. Copies of the O&M Manual and subsequent revisions shall be submitted to the Regional Office for review and approval. The O&M Manual shall be reviewed and updated at least every five years.
 - g. Fecal Coliform. Wastewater that exceeds fecal coliform limits of 200 colonies/100mL shall not be irrigated at the golf course.
 - h. Public Access. The public shall not be allowed into an area when irrigation of the wastewater is being conducted.
 - i. Labeling. All piping and sprinklers associated with the distribution or transmission of wastewater shall be color-coded and labeled or tagged to warn against the consumptive use of contents.
 - j. Emergency Outfall. The storage shall have a designated outfall from which a sample may be collected and flow measured.
11. The permittee shall submit a report semi-annually with the Discharge and Monitoring reports which address measures taken to locate and eliminate sources of infiltration and inflow into the city's collection system.



Missouri Department of Natural Resources
Water Protection Program
NPDES Permits and Engineering Section

Water Quality Review Sheet
Determination of Effluent Limits

Facility Information

FACILITY NAME: Mountain View Wastewater Treatment Plant NPDES #: MO-0026310

FACILITY TYPE/DESCRIPTION: Activated Sludge

ECOREGION: Ozark Highlands 8- DIGIT HUC: 11010008 COUNTY: Howell
Central Irregular Plains Osage Plains
Mississippi Alluvial Plains Ozark Highlands

LEGAL DESCRIPTION: SE 1/4, NE 1/4, Sec. 23, T27N, R7W LATITUDE/LONGITUDE: 36.9980/-91.6739

WATER QUALITY HISTORY: 1999 stream survey indicate polluted conditions 0.2 miles below outfall. Illegal discharge in July 2001 (raw sewage).

Outfall Characteristics

OUTFALL	DESIGN FLOW (CFS)	TREATMENT TYPE	RECEIVING WATERBODY	OTHER
002	0.775	Activated Sludge	Tributary to Jam Up Creek	ONRW
004	n/a	Irrigation Basin	Tributary to Jam Up Creek	ONRW

Receiving Waterbody Information

WATERBODY	CLASS	7Q10(CFS)	*DESIGNATED USES	OTHER CHARACTERISTICS
Trib. To Jam Up Creek	U	0.0	N/A	Losing Stream-ONRW
Jam Up Creek	C	0.0	LWW, AQL-CLF	Losing Stream-ONRW

*Cool Water Fishery (CLF), Cold Water Fishery (CDF), Irrigation (IRR), Industrial (IND), Boating & Canoeing (BTG), Drinking Water Supply (DWS), Whole Body Contact Recreation (WBC), Protection of Warmwater Aquatic Life and Human Health (AQL), Livestock & Wildlife Watering (LWW)

COMMENTS: Discharge is to the Current River Drainage which is classified as an Outstanding National Resource Water (ONRW). Following potential changes in Missouri's water quality standards proposed by EPA, net pollutant loading withing ONRW drainages shall not increase. Impacts from this rule will limit total pollutant loading in the Jam Up Creek watershed. Distance to classified segments of Jam-Up Creek is approximately 2.6 miles. Chronic criteria (ammonia) are applicable to classified waters only.

MIXING CONSIDERATIONS

Discharge is to a losing stream with a 7Q10 low flow of 0.0 cfs. Classified portions of Jam Up Creek are 2.6 miles from outfall 002. No mixing zone (0.25 miles) is allowed for this facility due to (1) diminished pollutant decay processes associated anaerobic sub-surface conditions and (2) uncertain destination of sub-surface flow. Acute criteria must be met end-of-pipe according to 10 CSR 20-7.031.

Permit Limits And Information

TMDL WATERSHED: ☐ N W.L.A. STUDY CONDUCTED: ☐ N DISINFECTION REQUIRED: ☒ Y DISINFECTION WAIVER: ☐ N
(Y OR N) (Y OR N) (Y OR N) (Y, N, NA)

OUTFALL# 002 & 004. Activated Sludge or Discharge from Irrigation Basin

WET TEST (Y OR N): ☐ N FREQUENCY: N/A A.E.C. N/A LIMIT: N/A

PARAMETER	MAXIMUM DAILY LIMIT	AVERAGE MONTHLY LIMIT	MONITORING FREQUENCY	SAMPLE TYPE
Flow	*	*	Daily	24 HOUR TOTAL
BOD ₅ (mg/l)	15	10	1/month	24 HOUR COMPOSITE
TSS (mg/l)	20	15	1/month	24 HOUR COMPOSITE
pH (SU)	6-9		1/MONTH	GRAB
Fecal Coliform (col./100 ml)	1000	400	1/MONTH	GRAB
NH ₃ -N (mg/l) Summer	11.667	2.1	1/month	24 HOUR COMPOSITE
NH ₃ -N (mg/l) Winter	13.667	2.4	1/month	24 HOUR COMPOSITE
Total Residual Chlorine (ug/l)	No DETECTABLE AMOUNT	No DETECTABLE AMOUNT	1/MONTH	GRAB
Chromium, Dissolved (ug/l)	*	*	1/MONTH	GRAB
Hardness (mg/l)	*	*	1/MONTH	GRAB
Total Phosphorus (mg/l)	*	*	1/MONTH	GRAB
NO ₂ + NO ₃ (mg/l)	*	*	1/MONTH	GRAB
Total Nitrogen (mg/l)	*	*	1/MONTH	GRAB
Temperature	*	*	1/MONTH	GRAB
Dissolved Oxygen (mg/l)	*	*	1/MONTH	GRAB

Receiving Water Monitoring Requirements

Site DS1. Near beginning of classified sections of Jam Up Creek.
(SE1/4, NE1/4, Sec. 20, T27N, R6W. Co. Rd 60-491)

PARAMETER(S)	SAMPLING FREQUENCY	SAMPLE TYPE	LOCATION
Flow	Daily	*	37.0002 / -91.6291
BOD ₅ , Temperature, Ammonia Nitrogen, Dissolved Oxygen, Nitrite + Nitrate, Total Nitrogen, Total Phosphorus	Monthly	Grab	37.0002 / -91.6291

Derivation and Discussion of Limits

BOD₅, TSS, Fecal Coliform. See 10 CSR 20-7.015(6). Due to losing stream and ONRW concerns, effluent quality shall not be reduced resultant from additional storage or retention.

Reviewer: Chris Zell

Date: 12-28-2001

Unit Chief: Mohsen Dkhili

Revised: 02-08-2002 by C. Zell

Revised: 08-26-2002 by C. Zell

Revised: 09-26-2002 by C. Zell

Revised: 10-02-2002 by C. Zell

Revised: 10-10-2002 by C. Zell